ID4001 - Communication and Teaching in Science

Credits: 15.0  Semester: 1
Number of Lectures:  
Lecturer: Dr Bruce Sinclair (co-ordinator)
Available: 2018-19

Overview
This module is based on the Undergraduate Ambassador Scheme. It provides final year students within the Faculty of Science (and penultimate year Integrated Masters students) with the opportunity to gain first-hand experience of science education through a mentoring scheme with science teachers in local schools. Students will act initially as observers in the classroom and later as classroom assistants. With permission of the teacher-in-charge, students should also be given the opportunity to lead at least one lesson, or activity within a lesson, during their placement. This module will enable students to gain substantial experience of working in a challenging and unpredictable working environment, and of communicating scientific ideas at various different levels; and to gain a broad understanding of many of the key aspects of teaching science in schools. While of particular value to students aiming for a career in education, these core skills are equally important for any career that requires good communication. Entry to this module is by selection following application and interview during the preceding semester.

Aims & Objectives
The aim is to allow students to experience classroom teaching, for them to learn from this experience through reflection, discussion, and practice, and to contribute to the learning of others.

Learning Outcomes
Students will have opportunities to enhance their skills in

- Public speaking and communication
- Organisational and interpersonal skills
- Time management skills
- Team-working skills
- Working in a challenging and unpredictable environment
- Professional conduct
- Addressing the needs of individuals
- The ability to improvise
- Giving (and receiving) feedback
- Handling difficult and potentially disruptive situations
- Experience of teaching methods

Synopsis
The following form the components of the module

- Undergoing an Enhanced Disclosure (PVG) check prior to entering the classroom; you will not be permitted to begin the module without this
- Being paired with a specific teacher mentor at your host school who will work with you to identify your aims and objectives for the term, and support your work in the host school
- Attendance at an induction session in Orientation Week giving you an introduction to the fundamentals of working with children and conduct in the school environment
- Attending presentations/discussions with outside speakers with experience of the modern classroom.
- Spending 25 hours of pupil contact time in the host school, developing your role within the classroom
- Design and completion of a Special Project
- A series of tutorials with your departmental representative at the University
- Completion of four summatively assessed elements - special project proposal, end of module report, teacher’s assessment and assessed talk

Pre-requisites
Available only to Senior Honours students who have been accepted following application and interview in the preceding semester. Integrated Masters students may take in Senior Honours or their final year, but may find difficulty taking in their final year due to the need for 120 credits at level 5. Acceptance via this process is a pre-requisite.

**Anti-requisites**
None

**Assessment**
Coursework = 100% comprising: Written report on the placement (35%) Teacher's assessment of student's placement (25%) Oral presentation (30%) Project proposal (10%)

**Additional information on continuous assessment etc**
Please see the module handbook online at https://www.st-andrews.ac.uk/students/academic/interdisciplinary-modules/communication-teaching-science/

**Recommended Books**
Please view University online record: http://resourcelists.st-andrews.ac.uk/modules/id4001.html

**General information**
Please also see the information online: https://www.st-andrews.ac.uk/students/academic/interdisciplinary-modules/communication-teaching-science/